

> d his

(FILE 'USPAT' ENTERED AT 08:48:02 ON 18 MAY 1998)

L1 571 S EFM(3A)MODULATION
L2 667 S RUN(2A)LENGTH(3A)LIMIT?
L3 24 S L1 AND L2

=> d l3 1-24

1. 5,734,787, Mar. 31, 1998, Optical disk having a particular format to store user-selected data, such as compressed video data or computed files, including a dedicated TOC region and an application TOC to identify the video compression format; Jun Yonemitsu, et al., 386/111; 369/48, 59; 386/96, 126 [IMAGE AVAILABLE]
2. 5,729,224, Mar. 17, 1998, Code conversion and demodulation apparatus, a method thereof, and a recording medium; Koichi Hirayama, et al., 341/59, 58, 61 [IMAGE AVAILABLE]
3. 5,715,355, Feb. 3, 1998, Optical disk having a particular format to store user-selected data, such as video data or computer files, including a dedicated TOC region; Jun Yonemitsu, et al., 386/95; 369/48, 275.3; 386/111, 126 [IMAGE AVAILABLE]
4. 5,708,651, Jan. 13, 1998, Optical disk having reduced track pitch and optical disk playback apparatus containing the same; Toshihiro Sugaya, et al., 369/275.4, 275.3 [IMAGE AVAILABLE]
5. 5,703,580, Dec. 30, 1997, Apparatus for encoding and decoding **run length limited** code data; Jung-wan Ko, 341/59, 58, 100, 101 [IMAGE AVAILABLE]
6. 5,696,505, Dec. 9, 1997, Method of converting a series of m-bit information words to a modulated signal, method of producing a record carrier, coding device, decoding device, recording device, reading device, signal, as well as record carrier; Kornelis A. Schouhamer Immink, 341/59, 95 [IMAGE AVAILABLE]
7. 5,650,989, Jul. 22, 1997, Reproducing system and equalizing method for use in it; Nobutaka Amada, et al., 369/59 [IMAGE AVAILABLE]
8. 5,617,384, Apr. 1, 1997, Method and apparatus for recovering TOC and user information from an optical disk and using the TOC information to access user tracks; Jun Yonemitsu, et al., 369/32, 48; 371/38.1; 386/1 [IMAGE AVAILABLE]
9. 5,608,712, Mar. 4, 1997, Method and means for varying pit duty cycle and changing pit depth on an optical recordable medium; John H. Rillum, et al., 369/116, 124, 275.4 [IMAGE AVAILABLE]
10. 5,606,540, Feb. 25, 1997, Digital signal reproducing apparatus; Hideki Hayashi, 369/59; 360/32; 369/48 [IMAGE AVAILABLE]
11. 5,602,825, Feb. 11, 1997, Optical disk and optical disk apparatus; Toshihiro Sugaya, et al., 369/275.4 [IMAGE AVAILABLE]
12. 5,602,816, Feb. 11, 1997, Recording and reproducing system and

equalizing method for use in it; Nobutaka Amada, et al., 369/59, 124
[IMAGE AVAILABLE]

13. 5,596,565, Jan. 21, 1997, Method and apparatus for recording MPEG-compressed video data and compressed audio data on a disk; Jun Yonemitsu, et al., 369/275.3; 348/342; 371/49.1 [IMAGE AVAILABLE]

14. 5,592,464, Jan. 7, 1997, Optical disk and optical disk apparatus; Toshihiro Sugaya, et al., 369/275.4, 275.3 [IMAGE AVAILABLE]

15. 5,592,450, Jan. 7, 1997, Method for reproducing compressed information data from a disk using a spatial frequency less than the track pitch; Jun Yonemitsu, et al., 369/48, 59; 371/49.1; 386/65, 96, 111, 116, 126 [IMAGE AVAILABLE]

16. 5,579,003, Nov. 26, 1996, Digital data modulation/demodulation system wherein the modulated data satisfies a minimum run number of zeros; Koichi Hirayama, et al., 341/59, 58 [IMAGE AVAILABLE]

17. 5,459,712, Oct. 17, 1995, Optical disk and optical disk apparatus where information is recorded having a specific track pitch and as a plurality of pit trains, each including a plurality of substantially trapezoidal pits; Toshihiro Sugaya, et al., 369/275.4, 275.3 [IMAGE AVAILABLE]

18. 5,450,421, Sep. 12, 1995, Method for correcting multiple erroneous symbols in error correcting encoded data; Tae-shik Joo, et al., 371/37.5, 37.4 [IMAGE AVAILABLE]

19. 5,305,296, Apr. 19, 1994, Method and apparatus for recording information on a recordable optical disc utilizing unrecorded count area to determine available test area; Mutsumi Kono, 369/50, 54, 116 [IMAGE AVAILABLE]

20. 5,198,813, Mar. 30, 1993, Digital recording system with (8,16,2,5) **run length limited** (RLL) code; Masaaki Isozaki, 341/59, 58; 360/40 [IMAGE AVAILABLE]

21. 5,086,421, Feb. 4, 1992, Disk playing apparatus having a compensation characteristic variable with velocity information; Kiyoshi Tateishi, 369/50; 360/73.01; 369/48, 54, 59 [IMAGE AVAILABLE]

22. 4,942,565, Jul. 17, 1990, Apparatus for recording a wobbling, spiral guide groove on an optical disc; Roger Lagadec, 369/59 [IMAGE AVAILABLE]

23. 4,928,187, May 22, 1990, Method and apparatus for encoding and decoding binary data; Theodore D. Rees, 360/40 [IMAGE AVAILABLE]

24. 4,481,615, Nov. 6, 1984, Motor controlling circuit of reproducing apparatus and method of controlling; Toshiaki Hioki, 369/50; 386/86 [IMAGE AVAILABLE]

d his

```
(FILE 'USPAT' ENTERED AT 08:48:02 ON 18 MAY 1998)
L1      571 S EFM(3A)MODULATION
L2      667 S RUN(2A)LENGTH(3A)LIMIT?
L3      24 S L1 AND L2
L4      131 S MINIMUM(3A)RUN(3A)LENGTH#
L5      7204 S SYNC?(2A)FRAME#
L6      157 S MINIMUM(3A)RUN?(3A)LENGTH#
L7      294 S MAXIMUM(3A)RUN?(3A)LENGTH#
L8      58154 S SYNC?(3A)SIGNAL#
L9      2 S L5(P)L6(P)L7(P)L8
L10     6 S L5 AND L6 AND L7 AND L8
```

=> d 110 1-6

1. 5,727,004, Mar. 10, 1998, Method and apparatus for data encoding and communication over noisy media; Michael B. Propp, et al., 371/47.1, 43.1, 46; 375/296 [IMAGE AVAILABLE]

2. 5,375,249, Dec. 20, 1994, Eight-to-fourteen-modulation circuit for a digital audio disc system; Heon-cheol Cho, 369/59; 364/258.1, 259.8, 260.1, 260.6, DIG.1 [IMAGE AVAILABLE]

3. 4,700,337, Oct. 13, 1987, Control apparatus for a recording medium drive motor in a digital information reproducing apparatus; June Inagawa, et al., 369/50, 59, 240 [IMAGE AVAILABLE]

4. 4,685,098, Aug. 4, 1987, Apparatus for reproducing data signal; Tadao Yoshida, 369/59, 48, 54, 58 [IMAGE AVAILABLE]

5. 4,544,962, Oct. 1, 1985, Method and apparatus for processing binary data; Misao Kato, et al., 360/40 [IMAGE AVAILABLE]

6. 4,539,667, Sep. 3, 1985, Disc players; Kazuhiko Fujiie, 369/50, 59, 133, 240; 386/125 [IMAGE AVAILABLE]